

DOE READING ROOM
DOCUMENT TO BE RELEASED

T070794

1. Location of Reading Room: Idaho Operations Public Reading Room 1776 Science Center Dr. University Place Idaho Falls, ID 83403	2. Expected Release Date: June 26, 1995
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3. Document Type:

<input type="checkbox"/> Letter	a. If letter or memo:
<input type="checkbox"/> Memorandum	To:
<input type="checkbox"/> Report	From:
<input type="checkbox"/> Publication	Subject:
<input checked="" type="checkbox"/> Other (Specify)	

Subject: VARIOUS SIGNED
VOLUNTEER CONSENT
FORMS FOR THE
INSTRUMENT CALIBRATION
EXPERIMENTS.

4. Document Date: May 1965 to January 1972	c. If publication: Name: Volume: Issue:
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5. Summary (2-3 lines indicating the major subject(s) of the document): Document contains nine signed volunteer consent forms, with dates ranging from May 7, 1965 to January 28, 1972. These were consent forms for the instrument calibration experiments. Also contains copies of pages from the Human Nuclide Studies Log Book plus hand written notes identifying volunteers for instrument calibration and CERT experiments.

6. Name and telephone number of person completing form: Thomas L. Baccus (208) 525-0696	7. Organization: Lockheed Idaho Technologies Co.	8. Date: June 26, 1995
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☐ Check here if a copy of the document is being sent to Headquarters.

HUMAN RADIATION EXPERIMENTS

RECORDS PROVENANCE FORM

REPOSITORY NAME	INEL
COLLECTION NAME	ASSURANCE DIVISION - REFERENCE MATERIALS, PUBLICATIONS, AND PROCEDURE MANUALS
BOX NUMBER	INEL HRE TEAM FILE CABINET
ADDITIONAL LOCATION INFORMATION	NORTH YELLOWSTONE COMPLEX (NYC) FOLDER: INEL HUMAN RESEARCH PROJECTS
FILE TITLE	VARIOUS VOLUNTEER CONSENT FORMS
TOTAL PAGES	
BATE NUMBER RANGE	
DOCUMENT NUMBER RANGE	

HEI FORM DOCUMENT NO.: T070126

DOCUMENT NO.: T070794

DOCUMENT TITLE: VARIOUS VOLUNTEER CONSENT FORMS

CROSS REFERENCES:

ITEMS OF INTEREST:

Redacted Version

by N/A
date N/A

MEDICAL QUESTIONNAIRE FOR CERT TEST

Name [REDACTED] Sex M
 Height 5' 11" Weight 180 Age 31

1. Have you ever had any known thyroid disease (overactive, underactive, goiter, nodules, surgery, etc.)? Yes No ✓
2. Have you ever had any thyroid function tests - basal metabolism tests, protein-bound iodine blood tests, radioactive iodine uptake tests?
 Yes No ✓
3. Have you ever had any known exposures to radioactive iodine beyond permissible limits? Yes No ✓
4. Have you taken any drugs during the past month? Yes No ✓
5. Are you taking any vitamin or mineral preparations? Yes No ✓
 If so, do list iodine on the contents, or is there iodine in them to your knowledge? Yes No
6. Have you had any x-ray studies within the past year in which a radio-opaque dye is used - such as, gallbladder x-rays, or bronchograms?
 Yes No ✓
7. Are you using iodized table salt at home? Yes ✓ No

Describe details of any "yes" answers to questions 1-6.

Note: Medical records don't reflect involvement with capsule studies

Redacted Version

By [Signature]
 date 8/25/95

REPOSITORY INEL

COLLECTION Insurance Div Ref Matt's Pubs. & Procedure Manuals

BOX No. INEL NRE Team File Cabinet

FILE folder: INEL Human Research Projects

SUBS. Various Volunteer Consent Forms

S. Atomic Energy Commission
Health and Safety Division

VOLUNTARY CONSENT FOR PERSONAL PARTICIPATION
IN SCIENTIFIC HUMAN STUDIES

I, [REDACTED], do hereby acknowledge that I have volunteered as an AEC employee to participate personally in a scientific investigation promoted by and for the Atomic Energy Commission. I understand the study requires me to take internally a small quantity or quantities of radioisotopes which has been estimated by the investigators and the ID Medical Branch to deliver less than 10 per cent of the radiation guide limits permitted me for occupational radiation exposure. I understand that a documented record of these isotope studies will be on file with the ID Health and Safety Division as part of my occupational exposure and/or medical record.

[REDACTED]
Signature

Witnesses:

29 October 1965
Date

[Signature]
Signature

[Signature]
Signature

Experiment No. 6

Nuclide Taken	Quantity, uc. <small>microcuries</small>	Date Taken	T 1/2 eff. days	Administration		
				Chemical Form	Physical Form	Route
Cs ¹³²	4.0 /200		6.2	Cs Cl ₂	Liquid	Oral

Approved By: [Signature]

Chief, Analytical Chemistry Branch

Date: 10-29-65

[Signature]
Chief, Medical Branch

Date: 10-29-65

Study Completed: 11/22/65

Date

1
file
S. Atomic Energy Commission
Health and Safety Division

VOLUNTARY CONSENT FOR PERSONAL PARTICIPATION
IN SCIENTIFIC HUMAN STUDIES

I, [REDACTED], do hereby acknowledge that I have volunteered as an AEC employee to participate personally in a scientific investigation promoted by and for the Atomic Energy Commission. I understand the study requires me to take internally a small quantity or quantities of radioisotopes which has been estimated by the investigators and the ID Medical Branch to deliver less than 10 per cent of the radiation guide limits permitted me for occupational radiation exposure. I understand that a documented record of these isotope studies will be on file with the ID Health and Safety Division as part of my occupational exposure and/or medical record.

[REDACTED]
Signature

Witnesses:

Don B. Martin
Signature

Ronald M. Lane
Signature

Date June 16, 1966

Experiment No. 8

Administration						
Nuclide Taken	Quantity, uc.	Date Taken	T 1/2 eff. days	Chemical Form	Physical Form	Route
<u>I 131</u>	<u>1.1</u>	<u>6/20/66</u>	<u>7 days</u>		<u>Insoluble Capsule</u>	<u>ORAL</u>

Approved By: C. L. Lee
Chief, Analytical Chemistry Branch

Date: 6-16-66

G. R. Lock
Chief, Medical Branch

Date: 6-17-66

Study Completed: 6-22-1966
Date

VOLUNTARY CONSENT FOR PERSONAL PARTICIPATION IN SCIENTIFIC HUMAN STUDIES

I, [REDACTED], do hereby acknowledge that I have volunteered as an AEC employee to participate personally in a scientific investigation promoted by and for the Atomic Energy Commission. I understand the study requires me to take internally a small quantity or quantities of radioisotopes which has been estimated by the investigators and the ID Medical Branch to deliver less than 10 per cent of the radiation guide limits permitted me for occupational radiation exposure. I understand that a documented record of these isotope studies will be on file with the ID Health and Safety Division as part of my occupational exposure and/or medical record.

Signature [REDACTED]

Witnesses:

Date 7/11/65

Katherine Parker

Signature

[Signature]

Signature

Experiment No. 4

Nuclide Taken	Quantity, uc.	Date Taken	T 1/2 eff. days	Administration		
				Chemical Form	Physical Form	Route
Ar ⁴¹	2.0	8/12/65	<<<.08	Inert Gas	Gas	Resp.

Approved By:

Claude Hill
Chief, Analytical Chemistry Branch

Date:

8/11/65

George R. Lock
Chief, Medical Branch

Date:

8/11/65

Study Completed:

8/12/65
Date

U. S. ATOMIC ENERGY COMMISSION
Idaho Operations Office, Health and Safety Division
Idaho Falls, Idaho

VOLUNTARY CONSENT FOR PARTICIPATION IN HUMAN STUDIES

SUMMARY OF STUDY

Identification No.

Description and Purpose: The purpose of the proposed study is to complete a study already in progress to develop additional applications for the helical-scan counter. A high-resolution focusing collimator has been added to the equipment so that the spatial resolution has been markedly improved. Positions of different nuclides that are in close proximity to each other can be resolved. An initial test of this different counting system and new computer programs has been completed. In order to complete the study and have the necessary data for publication, the positions of

¹⁴¹ Ce	4.0	14	(see reverse side)
⁵¹ Cr	40	234	
Nuclide ⁸⁵ Sr	Quantity <u>4.0</u>	uc.; Guide value <u>26</u>	uc.; Critical
organ <u>LLI</u>	Effective half life <u>30</u>	hours <u>2530</u>	Polyethylene
		Chemical form <u>capsule</u>	
		<u>Polyethylene</u>	
Chemical toxicity <u>None</u>	Physical form <u>capsule</u>	Route <u>G. I. Tract.</u>	

Investigator Jesse I. Anderson

Date 1-28-72

VOLUNTARY CONSENT

I, , do hereby acknowledge that: (1) I have volunteered to participate personally in a scientific investigation promoted by and for the U. S. Atomic Energy Commission; (2) I understand that the study requires me to take internally a small quantity of a radioisotope that has been determined by the investigator and confirmed by a review committee to be less than the radiation guide limits permitted by AECM 0524 for occupational exposure; (3) I understand that expert opinion regards the radiation exposures approved for this study to be so low that no harmful effects are expected; (4) I have read the description of the proposed study above and have been given ample opportunity to discuss and/or clarify any questions that I might have concerning it; (5) I have been informed and assured by my administrative superiors that participation in this study is not in any way a condition of employment, and that I may refuse to participate, or to withdraw my consent at any time during the course of the study, without incurring any adverse reaction to the normal course of my employment; and (6) I understand that a documented record of these studies will be on file in the ID Health and Safety Division as part of my occupational exposure and/or medical record.

Cheryl Warr
Signature of Witness

Signature of Volunteer

1-10-72
Date

REVIEW AND APPROVAL

Charles Hill
Chief, Analytical Chemistry Branch

1-11-72
Date

Jesse I. Anderson
Chief, Medical Branch

1-13-72
Date

Date of Administration 1/28/72 Study Completed 1/28/72 Actual Dose 0.13 Rem.

Investigator Jesse I. Anderson

Date 1/28/72

three (3) different nuclides need to be determined repeatedly along the G. I. Tract of a human subject. One part of the study will be to use a new computer technique to display the counting data dynamically to show the movement of nuclides in the body. The procedure will be to do helical scans of an individual repeatedly over a 24-hour period after he has ingested 4.0 μCi of ^{141}Ce , 40 μCi of ^{51}Cr and 4.0 μCi of ^{85}Sr . Each radionuclide will be contained inside a polyethylene capsule.

U. S. Atomic Energy Commission
Idaho Operations Office, Health and Safety Division
Idaho Falls, Idaho

VOLUNTARY CONSENT FOR PARTICIPATION IN HUMAN STUDIES

SUMMARY OF STUDY

Identification No. 19

Description and Purpose

A human subject will ingest Cs 137 and Co 60 in separate polyethylene capsules. The time of ingestion of each nuclide will differ by approximately 1 hour. The purpose of the study is to test the capability of our helical scanning method to follow specific nuclides, as to quantity and distribution, as they change position in the body. This study is a good prerequisite to other in vivo translocation studies for internally deposited nuclides that may involve the GI tract, pulmonary system, etc.

Nuclide Cs 137; Quantity 1.6 uc.; Guide value 3.7 ~~uc.~~ ^{μC}; Critical
Co 60 1.5 ^{1.4} ~~uc.~~ ^{μC}; Chemical form Polyethylene Capsule
organ LI; Effective ~~life~~ ^{life} 1.4 ^{days}; Chemical form Polyethylene Capsule
Chemical toxicity None; Physical form Solid; Route Oral,

Investigator Jesse I. Anderson

Date January 20, 1970

VOLUNTARY CONSENT

I, [REDACTED], do hereby acknowledge that: (1) I have volunteered to participate personally in a scientific investigation promoted by and for the U. S. Atomic Energy Commission; (2) I understand that the study requires me to take internally a small quantity of a radioisotope that has been determined by the investigator and confirmed by a review committee to be less than the radiation guide limits permitted by AECM 0524 for occupational exposure; (3) I understand that expert opinion regards the radiation exposures approved for this study to be so low that no harmful effects are expected; (4) I have read the description of the proposed study above and have been given ample opportunity to discuss and/or clarify any questions that I might have concerning it; (5) I have been informed and assured by my administrative superiors that participation in this study is not in any way a condition of employment, and that I may refuse to participate, or to withdraw my consent at any time during the course of the study, without incurring any adverse reaction to the normal course of my employment; and (6) I understand that a documented record of these studies will be on file in the ID Health and Safety Division as part of my occupational exposure and/or medical record.

Bill Barnett
Signature of Witness

[REDACTED]
Signature of Volunteer

1-20-70
Date

REVIEW AND APPROVAL

[REDACTED]
Chief, Analytical Chemistry Branch

1-21-70
Date

[REDACTED]
Chief, Medical Branch

1-21-70
Date

Date of Administration 1-21-70 Study Completed 1-23-70 Actual Dose 3.7 ^{μC} ~~uc.~~

Investigator Jesse I. Anderson

Date 1-23-70

U. S. Atomic Energy Commission
Health and Safety Division

VOLUNTARY CONSENT FOR PERSONAL PARTICIPATION
IN SCIENTIFIC HUMAN STUDIES

I, [REDACTED], do hereby acknowledge that I have volunteered as an AEC employee to participate personally in a scientific investigation promoted by and for the Atomic Energy Commission. I understand the study requires me to take internally a small quantity or quantities of radioisotopes which has been estimated by the investigators and the ID Medical Branch to deliver less than 10 per cent of the radiation guide limits permitted me for occupational radiation exposure. I understand that a documented record of these isotope studies will be on file with the ID Health and Safety Division as part of my occupational exposure and/or medical record.

Signature [REDACTED]

Date

8/11/65

Witnesses:

Signature Lois L. Thompson

Signature Nate G. Olson

Experiment No. 3

Nuclide Taken	Quantity, mc.	Date Taken	T 1/2 eff. days	Administration		
				Chemical Form	Physical Form	Route
Ar ⁴¹	2.0	8/12/65	444.08	Inert Gas	Gas	Resp.

Approved By: Claude W. Hill
Chief, Analytical Chemistry Branch

Date: 8-11-65 ?

Lois L. Thompson
Chief, Medical Branch

Date: 8-12-65

Study Completed: 8/12/65
Date

VOLUNTARY CONSENT FOR PERSONAL PARTICIPATION
IN SCIENTIFIC HUMAN STUDIES

I, [REDACTED], do hereby acknowledge that I have volunteered as an AEC employee to participate personally in a scientific investigation promoted by and for the Atomic Energy Commission. I understand the study requires me to take internally a small quantity or quantities of radioisotopes which has been estimated by the investigators and the ID Medical Branch to deliver less than 10 per cent of the radiation guide limits permitted me for occupational radiation exposure. I understand that a documented record of these isotope studies will be on file with the ID Health and Safety Division as part of my occupational exposure and/or medical record.

Witnesses:

Orliff
Hillson

[REDACTED]
Signature
5-7-65

Date

Experiment No. 1 of date May 10 1965

Proposed Route of Administration Oral

Isotope Manganese 54 Chemical Form Chloride

Proposed Quantity 1 MC

Form of Administration: Capsule, Insoluble ✓

Soluble Capsule _____ Liquid _____

Solid _____

Approved By:

Orliff
[Signature]

Date 5-7-65

Date 5-7-65

Completed 5-11-65 C147 hr

U. S. Atomic Energy Commission
Health and Safety Division

VOLUNTARY CONSENT FOR PERSONAL PARTICIPATION
IN SCIENTIFIC HUMAN STUDIES

I, [REDACTED] do hereby acknowledge that I have volunteered as an AEC employee to participate personally in a scientific investigation promoted by and for the Atomic Energy Commission. I understand the study requires me to take internally a small quantity or quantities of radioisotope, which has been estimated by the investigators and the ID Medical Branch to deliver less than 10 per cent of the radiation guide limits permitted me for occupational radiation exposure. I understand that a documented record of these isotope studies will be on file with the ID Health and Safety Division as part of my occupational exposure and/or medical record.

[REDACTED]
Signature

Witnesses:

Nov 15 - 1965
Date

[Signature]
Signature

[Signature]
Signature

Experiment No. 7

Nuclide Taken	Quantity, cc.	Date Taken	T 1/2 eff. days	Administration		
				Chemical Form	Physical Form	Route
K ⁴²	2/44	11/1	0.52	KCl	liquid	oral

Approved By:

[Signature]
Chief, Analytical Chemistry Branch

Date: 11-16-65

[Signature]
Chief, Medical Branch

Date: 11-17-65

Study Completed:

11/22/65
Date

VOLUNTARY CONSENT FOR PERSONAL PARTICIPATION
IN SCIENTIFIC HUMAN STUDIES

I, [REDACTED], do hereby acknowledge that I have volunteered as an AEC employee to participate personally in a scientific investigation promoted by and for the Atomic Energy Commission. I understand the study requires me to take internally a small quantity or quantities of radioisotopes which has been estimated by the investigators and the ID Medical Branch to deliver less than 10 per cent of the radiation guide limits permitted me for occupational radiation exposure. I understand that a documented record of these isotope studies will be on file with the ID Health and Safety Division as part of my occupational exposure and/or medical record.

[REDACTED]
Signature

Witnesses:

5/12/66
Date

Don B. Martin
Signature

[Signature]
Signature

Experiment No. 10

Nuclide Taken	Quantity, uc.	Date Taken	T 1/2 eff. days	Administration		
				Chemical Form	Physical Form	Route
<u>Co⁶⁰</u>	<u>1.1</u>	<u>6-20-66</u>	<u>9.5</u>		<u>Intracutaneous</u>	<u>ORAL</u>

Approved By: [Signature]

Chief, Analytical Chemistry Branch

Date: 6-16-66

[Signature]
Chief, Medical Branch

Date: 6-17-66

Study Completed: 6-22-66
Date

MEDICAL QUESTIONNAIRE FOR CERT TEST

Name [REDACTED] Sex Male

Height 6'2" Weight 150 Age 31

1. Have you ever had any known thyroid disease (overactive, underactive, gorter, nodules, surgery, etc.)? Yes No X
2. Have you ever had any thyroid function tests - basal metabolism tests, protein-bound iodine blood tests, radioactive iodine uptake tests?
Yes No X
3. Have you ever had any known exposures to radioactive iodine beyond permissible limits? Yes No X
4. Have you taken any drugs during the past month? Yes No X
5. Are you taking any vitamin or mineral preparations? Yes No X
If so, do list iodine on the contents, or is there iodine in them to your knowledge? Yes No
6. Have you had any x-ray studies within the past year in which a radio-opaque dye is used - such as, gallbladder x-rays, or bronchograms?
Yes No X
7. Are you using iodized table salt at home? Yes X No

Describe details of any "yes" answers to questions 1-6.

Experiment Number	Date Taken	Name of Volunteer	Nuclide Administered	Quantity	Mede	Chemical Form	Effective Half-life	Date Completed	Initials
1	5-16-65		Mn ⁵⁴	1.1 μ Ci	Inert capsule	Chloride	5.2 days	5-11-65 0747 hr.	JH
2	6/25/65		A ⁴¹	2.0 μ Ci	Inert Gas	gas	< 0.076 d	6/25/65	JD
3	7/15/65	"	"	"	"	"	"	7/15/65	JD
4	8/12/65	"	"	"	"	"	"	8/12/65	JD
5	8/12/65		A ⁴¹	2.0 μ Ci	Inert Gas	"	"	8/12/65	JH
6	10/25/65		Cs ¹³²	—	Scrubbed	—	—	—	—
7	11/15/65		Cs ¹³²	2 μ Ci	oral	soln		11/15/65	JD
8	11/15/65		K ⁴²	2 μ Ci	Oral	KCl	0.52	11/19/65	JD
9	6/10/66		I ¹³¹	1.1 μ Ci	"	capsule	7 d	6/22/66	JD
10	7/27/66		Zn ⁶⁵	1.1 μ Ci	"	"	33.5 d	7/27/66	
11	6/18/66		Co ⁶⁰	1.1 μ Ci	"	"	9.5 d	6/22/66	JD
12			Cs ¹³⁷	1.6 μ Ci	"	"	N24 h	Cancelled	JD
13			Cs ¹³⁷	1.4 μ Ci	"	"	N24 h	Cancelled	JD
14	5/16/66		Ag ^{110m}	0.77 μ Ci	"	"	"	8/16/66	JD
15			Zn ⁶⁵	3 μ Ci	Scrubbed	—	—	—	—
16			Ru ¹⁰⁶	1.2 μ Ci	"	"	"	Cancelled	JD
17			Zn ⁶⁵	2.2 μ Ci	transferred	—	—	—	—
18			I ¹³¹	1.2 μ Ci				Cancelled	JD
19	1-21-70		Co ⁶⁰	1.2 μ Ci	Insoluble		30 hrs in GI tract	1-22-70	JD
20			Cs ¹³⁷	1.6 μ Ci	Capsules	alibates			
21			I ¹³¹	0.3 μ Ci	Oral	OK I d	6 day		
22	4/15/71		A ⁴¹	2.0 μ Ci	Inert Gas	gas	< 0.08	Cancelled	JD
23	4/27/71		A ⁴¹	2.0 μ Ci	Inert Gas	gas	< 0.08		
24			A ⁴¹	2.0 μ Ci	Inert Gas	gas	< 0.08		
25			A ⁴¹	2.0 μ Ci	Inert Gas	gas	< 0.08		
26			A ⁴¹	2.0 μ Ci	Inert Gas	gas	< 0.08		

Experiment	Date	Name of Volunteer	Name of Neulide	Quantity	Mode	Chemical	Form	Half-life	Comp'd	Notes
1	5-16-65		Mn 5L	1.1 ml	1.1 ml	1.1 ml	1.1 ml	5.2 days	0.747 hr	5-11-65
2	6/25/65		A 41	2.0 pc	2.0 pc	2.0 pc	2.0 pc	< 0.0768	6/25/65	ADA
3	7/15/65		"	"	"	"	"	"	7/15/65	ADA
4	8/12/65		"	"	"	"	"	"	8/12/65	ADA
5	8/12/65		A 41	2.0 pc	2.0 pc	2.0 pc	2.0 pc	"	8/12/65	ADA
6	10/15/65		Cs 132	"	"	"	"	"	10/15/65	ADA
7	11/15/65		Cs 132	2.4 pc	2.4 pc	2.4 pc	2.4 pc	0.52	11/19/65	ADA
8	6/16/66		I 131	1.1 pc	1.1 pc	1.1 pc	1.1 pc	7 d	6/27/66	ADA
9	7/27/66		Zn 65	1.1 pc	1.1 pc	1.1 pc	1.1 pc	33.5 d	7/27/66	ADA
10	6/18/66		Cs 137	1.1 pc	1.1 pc	1.1 pc	1.1 pc	9.5 d	6/27/66	ADA
11			Cs 137	1.6 pc	1.6 pc	1.6 pc	1.6 pc	N 24 hr	Cancelled	ADA
12			Cs 137	1.4 pc	1.4 pc	1.4 pc	1.4 pc	N 24 hr	Cancelled	ADA
13	5/16/66		A 110	0.7 pc	0.7 pc	0.7 pc	0.7 pc	"	8/16/66	ADA
14			Zn 65	3.4 pc	3.4 pc	3.4 pc	3.4 pc	-	Cancelled	ADA
15			Ku 106	1.7 pc	1.7 pc	1.7 pc	1.7 pc	"	Cancelled	ADA
16			Zn 65	3.4 pc	3.4 pc	3.4 pc	3.4 pc	"	Cancelled	ADA
17										
18			I 131	1.2 pc	1.2 pc	1.2 pc	1.2 pc		Cancelled	ADA
19	1-21-70		Cs 60	1.0 pc	1.0 pc	1.0 pc	1.0 pc	36 hrs in	1-22-70	ADA
20			I 131	0.3 pc	0.3 pc	0.3 pc	0.3 pc	6 day		
21	4/15/71		A 41	2.0 pc	2.0 pc	2.0 pc	2.0 pc	"	Cancelled	ADA
22	4/27/71		A 41	2.0 pc	2.0 pc	2.0 pc	2.0 pc	"	Cancelled	ADA
23			A 41	2.0 pc	2.0 pc	2.0 pc	2.0 pc	"	Cancelled	ADA
24			A 41	2.0 pc	2.0 pc	2.0 pc	2.0 pc	"	Cancelled	ADA
25			A 41	2.0 pc	2.0 pc	2.0 pc	2.0 pc	"	Cancelled	ADA
26			A 41	2.0 pc	2.0 pc	2.0 pc	2.0 pc	"	Cancelled	ADA

not point
 to overrule
 study

Cancelled
 ADA

→

→

Experiment Number	Date Taken	Name of Volunteer	Nuclide Administered	Quantity	Mode	Chemical Form	Effective Half-life	Date Completed	Initials
27		[REDACTED]	A ⁴¹	20 μ ci	Inert Gas	Gas	<0.08	Cancelled	Dyl
28		[REDACTED]	A ⁴¹	20 μ ci	Inert Gas	Gas	<0.08		
29	4/15/70	[REDACTED]	A ⁴¹	20 μ ci	Inert Gas	Gas	<0.08		
30		[REDACTED]	K ^{85m}	20 μ ci	"	"	<0.08		
31		[REDACTED]	"	"	"	"	"		
32		[REDACTED]	"	"	"	"	"		
33		[REDACTED]	"	"	"	"	"		
34		[REDACTED]	"	"	"	"	"		
35		[REDACTED]	"	"	"	"	"		
36		[REDACTED]	"	"	"	"	"		
37		[REDACTED]	¹⁴¹ Ce ⁵¹ Cr ⁸⁰ Se	40 4	Inert Capsule	Gas	30 hrs GI tract	1-28-72	JH
38		[REDACTED]	¹³³ Xe	3 μ ci	Inert Gas	Gas	<0.08 d	Cancelled	DD
39		[REDACTED]	"	"	"	"	"		
40		[REDACTED]	"	"	"	"	"		
41		[REDACTED]	"	"	"	"	"		

From Human Nuclide Studies Logbook

Grand 11/4/86

Following involved in

1. [REDACTED]
2. [REDACTED]
3. [REDACTED]
4. [REDACTED]
5. [REDACTED]
6. [REDACTED]
7. [REDACTED]
8. [REDACTED] ✓
9. [REDACTED]
10. [REDACTED]
11. [REDACTED]
12. [REDACTED]
13. [REDACTED]
14. [REDACTED] ✓
15. [REDACTED]
16. [REDACTED]
17. [REDACTED] ← ?
18. [REDACTED] ([REDACTED])
19. [REDACTED]
20. [REDACTED]

2053

Cert 2 - 3 people in half 12047

15, 7.7, 6.1 man to hybrid

Possible additional volunteers

21. [REDACTED]
22. [REDACTED] ← ?

Hitters

Question REsh pers. on list

5 Cert Reports

12035 - C. Hawley

C. Sill

G. Voelz

12047 - C. Hawley

D.R. Adam

D.F. Bunch

W.P. Gamill

E.H. Markee

M.W. Tiernam

12053 -

Adams

Bunch

J.B. Echo

Gamill

Hawley

Tiernam

Markee

12063 -

Bunch - Ed

Echo

Adams

Markee

R. McBride

Newcomb

Martenson

G. Ball

J.T. Collins

W.S. Harvie

acknowledged

12065 - J.D. Zimbrick

P. Voillegue

C.A. Pelletier

L.J. Lowder

J.B. Echo

E.H. Markee

1. [REDACTED]
2. [REDACTED]
3. [REDACTED]
4. [REDACTED]

Spickard 0404

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]

5-10-65

1-21-70
~~1-20~~

4-15-70

11-1-65

11-15-65

6-16-66

7-27-66

6-18-66

8-16-66

min. of 18 people

two sub if intake not defined

16 known

15 can be found

+

can interview the above to elicit others

Authors of reports may provide some info on volunteers
e.g. P. Voillique

(200-600 mRad to thousands of milk drinkers

Volunteers (I-131) 7/24/80

5/27/63

test date

1. 0.38 Rads

0.63 Rads

0.39 Rads

2. 0.23 "

0.36 "

3. 0.42 "

0.32 "

[REDACTED]

5 of 7 volunteers

15-30 mRad - to I-131 breathers